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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/601,025	06/20/2003	Jeffery A. Engelman	BLD920030006US1	7144
50441 7590 05/31/2007 DUFT BORNSSEN & FISHMAN, LLP 1526 SPRUCE STREET SUITE 302 BOULDER, CO 80302			EXAMINER SINGH, SATWANT K	
			ART UNIT 2625	PAPER NUMBER
			MAIL DATE 05/31/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/601,025

Applicant(s)

ENGELMAN ET AL.

Examiner

Satwant K. Singh

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 6/20/03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-3, and 5-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Nguyen et al (US 7,079,264).

3. Regarding Claim 1, Nguyen et al discloses a printer for printing an encoded data stream, the data stream capable of including a section of complex text data, the printer comprising: a text parser (Fig. 2, GPD parser 104) for parsing the encoded data stream to determine the section of complex text data in the encoded data stream (GPD parser parses the text based GPD file into internal binary data structures) (col. 7, lines 7-21); at least one font (device resident font) including a plurality of glyphs (symbol set in which the desired glyph is supported) (col. 9, lines 5-37) (***handled by the device font sub module 144, which is one of the five sub modules contained within the font module 120***) (***Fig. 3***); and a layout engine (Fig. 2, control module 116) coupled to the text parser (Fig 2, GPD parser 104) and with the at least one font (Fig. 2, font module 120), the layout engine for receiving the section of complex text data from the text parser (converting DLL calls into printer specific data) and for determining at least one

of the plurality of glyphs corresponding to the section of complex text data (Fig. 4, actual data translation) (col. 9, lines 10-37).

4. Regarding Claim 2, Nguyen et al discloses a printer further comprising: a rasterizer (Fig. 2, raster module 122), coupled with the layout engine (Fig. 2, control module 116), the text parser (Fig. 2, GPD parser 102) and the at least one font (Fig. 2, font module 120), the rasterizer (raster module handles all bitmap related DDI calls) (col. 7, lines 50-65) for positioning the at least one of the plurality of glyphs on at least one portion of a page corresponding to the section of complex text data (Fig. 4, S148) (driver sends bitmap image to the printer to allow the printer to draw the character's glyph on the printed document) (col. 9, lines 38-59).

5. Regarding Claim 3, Nguyen et al disclose a printer wherein the at least one font includes an encoding table (glyph translations table's map table) and a glyph table (glyph translation table), the encoding table including a plurality of codes and a plurality of glyph indices corresponding to the plurality of codes (glyph translation table's map table to determine the particular symbol set), the glyph table including the plurality of glyphs corresponding to the plurality of glyph indices (particular set in which the desired glyph is supported) (col. 9, lines 10-37).

6. Regarding Claim 5, Nguyen et al disclose a printer wherein the layout engine determines the at least one glyph by determining at least one index of the plurality of glyph indices for the section of complex text data (Fig. 4, S143) and at least one position for the at least one glyph (Fig. 4, S145) (col. 9, lines 10-37).

7. Regarding Claim 6, Nguyen et al discloses a printer wherein the text parser provides a remaining portion of the data stream not including the section of complex text data to the rasterizer to perform one-to-one rendering of a remaining portion of the data stream (Fig. 4, S16 and 148) (glyph not supported by a device resident font) (col. 9, lines 38-59).

8. Regarding Claim 7, Nguyen et al disclose a printer wherein the code is Unicode and wherein the section of complex text data includes Unicode complex text (Unicode standard support) (col. 4, lines 9-26).

9. Regarding Claim 8, Nguyen et al disclose a printer wherein the text parser determines the section of complex text data based upon at least one code word for the section of complex text data (Width Table data structure) (col. 13, lines 14-40).

10. Regarding Claim 9, Nguyen et al disclose a printer wherein the text parser determines the section of complex text data based upon at least one marker for the section of complex text data (first Unicode glyph handle is 1, second is 2, and so on) (col. 13, lines 14-40).

11. Regarding Claim 10, Nguyen et al disclose a printer for printing an encoded data stream, the data stream capable of including a section of complex text data, the printer comprising: means for parsing data (Fig. 2, GPD parser 104) for determining the section of complex text data in the data stream (GPD parser parses the text based GPD file into internal binary data structures) (col. 7, lines 7-21); and at least one font (device resident font) including a plurality of glyphs (symbol set in which the desired glyph is supported) (col. 9, lines 5-37), layout means (Fig. 2, control module 116), coupled to the parsing

means (Fig. 2, GPD parser 104) and with the at least one font defining means (device font sub module 144, which is one of the five sub modules contained within the font module 120) (Fig. 3), the layout means for receiving the section of complex text data from the text parser (converting DLL calls into printer specific data) and for determining at least one of the plurality of glyphs corresponding to the section of complex text data (Fig. 4, actual data translation) (col. 9, lines 10-37).

12. Regarding Claim 11, Nguyen et al disclose a method for printing an encoded data stream, the data stream capable of including a section of complex text data, the method comprising the steps of: (a) parsing the data stream in a printer to determine the section of complex text data in the data stream (GPD parser parses the text based GPD file into internal binary data structures) (col. 7, lines 7-21); and (b) utilizing a layout engine (Fig. 2, control module 116) to receive the section of complex text data from the text parser (converting DLL calls into printer specific data) and to determine at least one of the plurality of glyphs corresponding to the section of complex text data (Fig. 4, actual data translation) (col. 9, lines 10-37).

13. Regarding Claim 12, Nguyen et al disclose a method of claim 11 further comprising the step of: (c) positioning the at least one of the plurality of glyphs on at least one portion of a page corresponding to the section of complex text data (driver sends bitmap image to the printer to allow the printer to draw the character's glyph on the printed document) (col. 9, lines 38-59).

14. Regarding Claim 13, Nguyen et al disclose a method further comprising the step of: (c) utilizing an encoding table including a plurality of codes (glyph translation table's

map table to determine the particular symbol set) and a plurality of glyph indices corresponding to the plurality of codes (glyph translation table), the glyph table including the plurality of glyphs corresponding to the plurality of glyph indices (particular set in which the desired glyph is supported) (col. 9, lines 10-37).

15. Regarding Claim 14, Nguyen et al disclose a method wherein the layout engine determines the at least one glyph by determining at least one index of the plurality of glyph indices for the section of complex text data (Fig. 4, S143) and at least one position for the at least one glyph (Fig. 4, S145) (col. 9, lines 10-37).

16. Regarding Claim 15, Nguyen et al disclose a method further comprising the step of: (d) utilizing a rasterizer to perform one-to-one rendering of a remaining portion of the encoded data stream not including the section of complex text data (Fig. 4, S16 and 148) (glyph not supported by a device resident font) (col. 9, lines 38-59).

17. Regarding Claim 16, Nguyen et al disclose a method wherein the code is Unicode and wherein the section of complex text data includes Unicode complex text (Unicode standard support) (col. 4, lines 9-26).

18. Regarding Claim 17, Nguyen et al disclose a method wherein the data parsing step (a) further includes the step of: (a1) determining the section of complex text data based upon at least one code word for the section of complex text data (Width Table data structure) (col. 13, lines 14-40).

19. Regarding Claim 18, Nguyen et al disclose a method wherein the data parsing step (a) further includes the step of: (a1) determining the section of complex text data

based upon at least one marker for the section of complex text data (first Unicode glyph handle is 1, second is 2, and so on) (col. 13, lines 14-40).

***Claim Rejections - 35 USC § 103***

20. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

21. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen et al in view of McConnell et al. (US 5,526,477).

22. Regarding Claim 4, Nguyen et al fail to teach a printer wherein at least one glyph can include a null glyph.

McConnell et al teach a printer wherein at least one glyph can include a null glyph (defaults representing null characters) (col. 22, lines 8-16).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teachings of Nguyen with the teaching of McConnell to use a null glyph for the purpose of combining characters.

***Conclusion***

23. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Muikaichi et al. (US 6,661,416) discloses a character sequence drawing apparatus which stores font data and font processing functions for executing processes for using the font data.



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Nguyen et al. (US 6,825,841) discloses a modular universal printer driver which dramatically improves the extensibility of the driver architecture and the support for printer features.

Nguyen et al. (US 6,919,966) discloses a computer system and method for outputting printer commands to a printer in response to a print request from an application program.

Adler et al. (US 7,155,672) discloses methods and system for dynamic font subsetting.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Satwant K. Singh whose telephone number is (571) 272-7468. The examiner can normally be reached on Monday thru Friday 8am - 4:30pm.

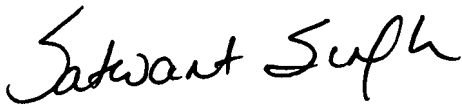
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on (571) 272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



**DAVID MOORE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800**

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



sks

Satwant K. Singh  
Examiner  
Art Unit 2625